

**BLACK & VEATCH Waste Science, Inc.**  
*Philadelphia Office*

EPA Region 5 Records Ctr.



352456

**MEMORANDUM**

U.S. EPA-Region V  
Highland Park Landfill FSIP  
Preliminary Recommendation Sheet

B&V Project 71380.134  
B&V File D.4  
April 17, 1995

To: File - Highland Park Landfill, ILD981795479

From: Dane G. Pehrman

**Site History**

The Highland Park Landfill (HPLF) is located approximately 1,400 feet east of the intersections of Halfday Road (IL Route 22) and the Skokie Highway (U.S. Route 41) in the city of Highland Park, Lake County, Illinois. The 80-acre landfill began operations in 1930, receiving unknown amounts and types of municipal wastes. In 1963, the City of Highland Park applied for a permit to dispose of municipal wastes and sewage sludge in three 300-foot long, 30-foot deep, unlined trenches in the landfill. The widths of these trenches are unknown; therefore, the volume could not be calculated. According to a representative of the City of Highland Park, the landfill was closed and covered with 5-feet of an unknown fill material in 1973; however, subsequent investigations of the site have observed some exposed waste in excavated areas and under tree falls. This may suggest that the 5-foot cover is not uniform. During its operation, the landfill was owned and operated by the City of Highland Park; however, since closing, the property has been divided into three lots owned by the City of Highland Park, the North Shore Sanitary District, and the Highland Park County Club. The southern half of HPLF has been used as a golf course since 1973. The northern portion of the site is used as a tree nursery. County Club personnel indicated that the southern portion of the site is subject to severe subsidence and cover material must occasionally be added. County Club personnel also indicated that concrete, tires, and other debris occasionally protrude through the ground surface, that some areas do not support vegetation, and that odors and garbage have been detected during sandtrap excavation. According to the Lake County Department of Health and the City of Highland Park, there are two to four groundwater monitoring wells located around the perimeter of the landfill; however, these wells have not been sampled in over six years and the City had no data available. There are no records of violations concerning HPLF; however, several complaints regarding ponding, leachate seeps, odors, and rats have been reported by the Lake County Health Department. IEPA performed several inspections of remaining fill areas in 1976 and found no evidence of leachate or other waste deposition.

Site discovery occurred by the Lake County Health Department in 1986. IEPA performed a preliminary assessment at the site in December 1987 which was submitted to USEPA. On 31 May 1988, EPA's FIT contractor completed a site inspection (SSI) of HPLF that included the collection and analysis of four surface water samples, four sediment samples, and eight surface soil samples. Groundwater monitoring has not been

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**MEMORANDUM**

Page 2

U.S. EPA-Region V  
Highland Park Landfill  
Preliminary Recommendation Sheet

B&V Project 71380.134

performed at the site. Surface soil samples were collected at various locations around the landfill site and in an area of exposed waste. The surface soil samples indicated the presence of TCL compounds and TAL analytes including PAHs, volatile organics, pesticides, PCBs, and heavy metals. Surface water samples indicated the presence of barium, copper, lead, and zinc at levels significantly above background concentrations, supporting an observed release to surface water. Sediment samples were collected; however, a background sample was not collected. Sediment samples from a wetland area, adjacent to the landfill indicated the presence of PAHs, volatile organics, pesticides, and heavy metals. There are no other known sampling investigations of the site since this SSI.

The site owner, the Lake County Health Department, and the IEPA were all contacted during this screening evaluation. The site owner, the City of Highland Park provided information concerning the closure of the landfill, the history of the landfill, and some information about the Skokie River. Lake County Health Department provided an inspection history of the site that indicated the landfill was properly maintained. IEPA informed BVWS that there were no other files concerning this site and that they knew little about the site itself.

**PreScore**

Two scoring scenarios were developed for this preliminary screening based on probable migration pathways of the waste deposited. In both scenarios, a release of contributable contamination from the landfill has been detected along the surface water pathway. There are no groundwater targets since file information indicates that all residents in the area receive water from Lake Michigan. Community wells in Lake County are all located outside the TDL of the groundwater pathway. There is no information to suggest that there are private well users within 4 miles of the site.

Scenario #1 is based on information provided in the file material and is primarily based on the 1989 SSI Report prepared by FIT. The primary driver for this scenario is the presence of over 0.1 mile of wetlands at the beginning of the suspected surface water pathway, upgradient of an observed release of metals in a surface water sample. This drives the surface water pathway LR value to 550 and increases the target score by documenting a Level I contaminated environmental targets, which maxes out the surface water pathway score at 100. Based on this scenario, HPLF would score over the HRS threshold.

Scenario #2 is based on information provided in the file material and is primarily based on the 1989 SSI Report prepared by FIT. However, the wetlands identified in Scenario #1 are not along the surface water pathway; therefore, the surface water pathway

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**MEMORANDUM**

Page 3

U.S. EPA-Region V  
Highland Park Landfill  
Preliminary Recommendation Sheet

B&V Project 71380.134

is driven by the fishery located approximately 3 miles downstream. This results in a lower surface water pathway score of 43.73. Based on this scenario, HPLF would not score over the HRS threshold.

Pathway	Scenario #1	Scenario #2
Groundwater	0.00	0.00
Surface Water	100.00	43.73
Soil Exposure	6.98	6.98
Air	1.40	1.40
<b>Site Score</b>	<b>50.13</b>	<b>22.15</b>

**Gaps**

Informational gaps identified in this preliminary review include confirmation of sensitive environments other than wetlands within the surface water pathway TDL.

**Recommendation**

Site Reconnaissance Needed

Yes. Although wetland areas are shown on USGS and NWI maps, the type and location should be confirmed to ensure that they are located along the surface water pathway. There is also some question as to whether the stream that connects the wetland area and the Skokie River is a perennial stream.

Field Sampling Needed

No. File information is sufficient to pursue an HRS scoring package for the project provided that the wetland areas are present and that over 0.1 mile of wetland frontage is confirmed to be present along this pathway. In the event that the surface water pathway from the wetland to the Skokie River cannot be confirmed, the site will not score and no sampling would be necessary.